

In the Claims:

Please cancel Claims 4, 18, 33, 48 and 62.

In Claim 5, line 1, delete "4" and insert -- 3 --.

In Claim 19, line 1, delete "18" and insert -- 17 --.

In Claim 34, line 1, delete "33" and insert -- 32 --.

In Claim 49, line 1, delete "48" and insert -- 47 --.

In Claim 63, line 1, delete "62" and insert -- 61 --.

Please amend Claims 1, 15, 29, 44 and 59 as follows:

1. (Amended) An *in vivo* method of [therapeutic or prophylactic genetic immunization of] treating a mammalian host, which comprises:

(a) generating a DNA fragment which expresses an antigenic protein or antigenic protein fragment;

(b) distributing said DNA fragment on a particle surface, resulting in a particulate polynucleotide;

(c) inoculating said mammalian host with said particulate polynucleotide; and,

(d) delivering said particulate polynucleotide to the cytoplasm of [a target] an antigen presenting cell within said mammalian host, such that said expressed antigenic protein or antigenic protein fragment is presented to the membrane surface of said [target] antigen presenting cell through the MHC class I pathway, wherein said presentation of said antigenic protein or protein fragment elicits an immune response in said host.


15. (Amended) An *in vivo* method of [therapeutic or prophylactic genetic immunization of] treating a mammalian host, which comprises:

(a) generating a DNA fragment which expresses an antigenic protein or antigenic protein fragment;


(b) distributing said DNA fragment on a particle surface, resulting in a particulate polynucleotide;

(c) inoculating said mammalian host with said particulate polynucleotide using a biolistic device; and,


(d) delivering said particulate polynucleotide to the cytoplasm of [a target] an antigen presenting cell within said mammalian host, such that said expressed antigenic protein or antigenic protein fragment is presented to

42  the membrane surface of said [target] antigen presenting cell through the MHC class I pathway, wherein said presentation of said antigenic protein or protein fragment elicits an immune response in said host.

29. (Amended) An *in vivo* method of [therapeutic or prophylactic genetic immunization of] treating a mammalian host, which comprises:

- 43  (a) generating a DNA fragment which expresses an antigenic protein or antigenic protein fragment;
- (b) distributing said DNA fragment on a particle surface, resulting in a particulate polynucleotide;
- (c) inoculating said mammalian host with said particulate polynucleotide by direct injection; and,
- (d) delivering said particulate polynucleotide to the cytoplasm of [a target] an antigen presenting cell within said mammalian host, such that said expressed antigenic protein or antigenic protein fragment is presented to the membrane surface of said [target] antigen presenting cell through the MHC class I pathway, wherein said presentation of said antigenic protein or protein fragment elicits an immune response in said host.

44. (Amended) An *ex vivo* method of [therapeutic or prophylactic genetic immunization of] treating a mammalian host, which comprises:

- 44  (a) generating a DNA fragment which expresses an antigenic protein or antigenic protein fragment;
- (b) distributing said DNA fragment on a particle surface, resulting in a particulate polynucleotide;
- (c) delivering said particulate polynucleotide to the cytoplasm of [a target] an antigen presenting cell of a mammalian host *in vitro*, such that said expressed antigenic protein or antigenic protein fragment is presented on the membrane surface of said [target] antigen presenting cell through the MHC class I pathway, wherein said presentation of said antigenic protein or protein fragment elicits an immune response in said host; and,
- (d) inoculating said mammalian host with said [target] antigen presenting cell by direct injection.

59. (Twice amended) An *ex vivo* method of [therapeutic or prophylactic genetic immunization of] treating a mammalian host, which comprises:

45 